

### **AMENDMENTS TO THE SPECIFICATION**

Paragraph numbers in the amendments that follow refer to the published version of this application, US 2004/0030688 A1:

[0011]

A number of Web sites offer tools that are intended to make searching more efficient. For example, Internet Search Agent (ISA) (~~www.renegade-software.com/ISA~~) is a Java Web search tool that queries several popular search engines, automatically downloads the results, and then displays them on the user's browser. ISA can be configured as an unattended download agent that retrieves Web pages for viewing offline, or as an improved search engine that returns entire Web pages, rather than just a title and several lines of text. ISA is non-interactive, but it does not attempt to autonomously improve the precision of the user's search results.

[0012]

SearchPad (~~www.searchpad.com~~) is an intelligent agent for Web search, metasearch and resource classification. It supports basic and advanced Boolean queries. It also allows users to specify a "phrase neighborhood" to search, in terms of words, sentences, and paragraphs. SearchPad offers "accept" and "reject" rules to support screening of results and allows users to give feedback by rating documents that it finds. These user preferences are reused for similar, subsequent searches and for defining search topics. Thus, SearchPad can learn rules and definitions of topics, but it is highly interactive and relies on the user either to build the rules explicitly or to provide relevance feedback by indicating which keywords make a page relevant or irrelevant.

[0013]

SmartRanker (~~www.toote.com/smartranker.html~~) is a ranking search engine that attempts to anticipate the user's information needs. It sends an intelligent agent to get search results from a number of popular Internet search engines. The results are analyzed, filtered, grouped and re-

ranked by a ranking agent using a human-created knowledge base. The SmartRanker Web site does not specify how the knowledge base is built or specifically how the re-ranking is performed.

[0014]

Karnak (~~www.karnak.com~~) is a search service that guides the user through the process of building search queries that are structured to provide precise information. Karnak then searches the Web, adding what it considers to be the best information to a personal library that is created for each user. The library can be accessed from any Internet-capable computer. Karnak checks for dead and stale links before providing results and regularly updates users by e-mail on the status of their research.

[0016]

Web crawling can be used as a search technique to find pages having hyperlinks to or from a root site that is known to be relevant to the user's query. These linked pages are often relevant to the query, as well, even when they do not contain the exact search terms used in the query. The CLEVER crawler (~~www.almaden.ibm.com/cs/k53/clever.html~~) uses hypertext classification and topic distillation tools to focus its work within a specific topic domain, while ignoring unrelated and irrelevant material. This focused crawler is described by Chakrabarti et al., in "Focused Crawling: A New Approach to Topic-Specific Web Resource Discovery," published in *Proceedings of the Eighth World Wide Web Conference* (Toronto, 1999), and incorporated herein by reference.